

The effect of the fast of Ramadan on accident and emergency attendances

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Introduction

During the month of Ramadan it is estimated that, worldwide, some 400 million Muslims fast from dawn to sunset. The clinical implications of this have been identified as needing more scientific attention¹. St Mary's is a large inner-city accident and emergency (A & E) department serving a population of widely varied ethnic and cultural background. We set out to determine whether there was a change in the number of Muslims attending during Ramadan, and whether or not these attendances were accident-related.

Methods and results

Approximately 55 000 new patients are treated in our department each year and each attendance is documented on our computer system. All patients have standard Korner set details, including religion, recorded on arrival. The total numbers of Muslims and of non-Muslims attending during the 30 days of Ramadan (22 February–23 March 1993 inclusive)

be related to the vigilance of adults caring for them, and the threshold for attendance may be influenced by the well-being of parents. The control group consisted of total non-Muslim attendances. The above groups were compared using χ^2 tests.

The results are shown in Table 1. This demonstrates a significant rise in the number of Muslims attending during Ramadan compared to non-Muslims, with the proportion of Muslims rising from 3.63% of total attendances in the periods before and after Ramadan to 5.11% during Ramadan ($P=0.0024$). The rise in non accident-related attendances among Muslims was also significant when compared to non-Muslims ($P=0.027$), and there was a similar rise in accident-related attendances, although numbers were smaller and this did not reach a significant level ($P=0.056$).

Discussion

According to Muslim teaching, Ramadan is the month during which the holy Koran was revealed. Fasting is thought to endow the believer with the habit of self-control, helping to avoid sin, thereby ensuring passage

Table 1. Total Muslim and non-Muslim attendances for 15 day periods before, during and after Ramadan, with figures for accident-related and non accident-related attendances

Attendances	15 Days before	First 15 days	Second 15 days	15 Days after
Total ($P=0.0024$)				
Muslim (%)	68 (3.16)	106 (4.89)	127 (5.33)	90 (4.10)
Other	2083	2063	2257	2104
Accident ($P=0.056$)				
Muslim (%)	21 (2.63)	38 (4.77)	35 (4.32)	21 (2.85)
Other	777	759	776	717
Non-accident ($P=0.027$)				
Muslim (%)	47 (3.46)	68 (5.21)	92 (5.85)	69 (4.74)
Other	1310	1304	1481	1387

were compared to the same groups seen in the 15 days preceding and 15 days following Ramadan. As patients are discharged, the doctor treating them must report, amongst other details, whether the attendance was accident-related. Thus, the totals of Muslims and non-Muslims were divided into accident-related or non accident-related attendances.

All Muslim patients were included. Children were not excluded since, although children are not required to fast, there is no fixed age limit and many children choose to take part. Accidents among children may

into the afterlife. All Muslims from the age of puberty must fast except the sick, the pregnant and those undertaking a long journey. Such people are required to fast an equivalent number of days at a later date. The fast entails absolute abstention from allowing anything to enter the body during the hours from dawn to sunset for one lunar month².

Although there has been little work studying the clinical effects of Ramadan, reports have suggested problems managing patients with diabetes, who may not consider themselves sick and therefore exempt, and those with epilepsy, who may need modification of drug regimens. Non-compliance with prescribed treatment regimens is common during Ramadan³. General fatigue due to fasting, by lowering one's sense

of well-being, may lower the threshold for seeking medical advice. The physical fatigue associated with fasting results in impairment of cognitive function, as shown by performance in flicker fusion tests⁴. This could explain the increase in accidental injury during the study.

Given the increased demand for medical services demonstrated by this study, medical staff need to be aware of the particular problems faced by Muslim patients during Ramadan. Respect for the religious and cultural beliefs of all sections of society, as is now enshrined in the *Patient's Charter*⁵, means we must have a flexible approach to the differing needs of patients which thus arise. Simple measures such as changes in treatment regimens have been shown to be effective in allowing compliance with both religious and medical needs⁶.

References

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Forthcoming events

Morphologic Findings in Renal Disease and Transplants: Clinico-pathologic Correlations

5-8 October 1994, Maryland, USA

Further details from: (see entry for 29 August-2 September 1994)

Registration of Agrochemicals in Europe

6-7 October 1994, London, UK

Further details from: Alison Sells, IBC Technical Services Ltd, Gilmoora House, 57-61 Mortimer Street, London W1N 7TD, UK (Tel: 071-637 4383; Fax: 071-631 3214)

Diet and Cancer: British Nutrition Foundation/Europe Against Cancer Seminar

13 October 1994, London, UK

Further details from: Sandra Rodriguez, British Nutrition Foundation, High Holborn House, 52-54 High Holborn, London WC1V 6RQ, UK (Tel: 071-404 6504; Fax: 071-404 6747)

Practical Cardiovascular Pathology

17-18 October 1994, London, UK

Further details from: Education & Conference Centre, National Heart & Lung Institute, Dovehouse Street, London SW3 6LY, UK (Tel: 071-351 8172; Fax: 071-376 3442)

MRCP Part II Course

17-21 October 1994, London, UK

Further details from: Dr D Geraint James, Royal Free Hospital, Pond Street, Hampstead, London NW3 2QG, UK (Tel: 071-794 0500 ext 391)

Regulatory Harmonization of New and Existing Chemicals

20-21 October 1994, London, UK

Further details from: (see entry for 6-7 October 1994)

Impactation Grafting Symposium

27-28 October 1994, Shropshire, UK

Further details from: Erica Wilkinson, Symposium Secretary, Robert Jones & Agnes Hunt Orthopaedic & District Hospital, Oswestry, Shropshire SY10 7AG, UK (Tel: 0691-655311, ext 3570)

Smoking Cessation

2-4 November 1994, London, UK

Further details from: Janice Rossabi, LHMC, Academic Department of Psychiatry, Turner Street, London E1 2AD (Tel: 071-377 7266)

First National Conference on Orthogeriatrics

3 November 1994, Birmingham, UK

Further details from: Sarah Leigh, Profile Productions Ltd, Northumberland House, 11 The Pavement, Popes Lane, London W5 4NG, UK (Tel: 081-566 1902; Fax: 081-579 9258)

13th Neurosurgical Nurses' Conference

8-9 December 1994, San Francisco, USA

Further details from: University of California, San Francisco Schools of Medicine and Nursing, Rm LS-105, Office of CME, San Francisco, California 94143-0742, USA (Tel: 0101 415 476-4251; Fax: 0101 415 476 0318)

DNA Databanks and Repositories

4-5 November 1994, Minnesota, USA

Further details from: (see entry for 29 August-2 September 1994)

Interpretation of Prostatic Biopsy

19-20 November 1994, Washington DC, USA

Further details from: (see entry for 29 August-2 September 1994)

The IBUS 1995 Breast Ultrasound Seminar

14-16 September 1995, Copenhagen, Denmark

Further details from: Bente Winkel, Congress Secretary, Department of Ultrasound, Herlev Hospital, University of Copenhagen, DK-2730 Herlev, Denmark (Tel: 010 45 44 53 5300; Fax: 010 45 4494 8009)

10th World Congress of Psychiatry

23-28 August 1996, Madrid, Spain

Further details from: TILES, OPC, Princesa 81-2° Izq., 28008 Madrid, Spain (Tel: 010 34 544 88 54; Fax: 010 34 544 98 75)